



OBJECT POSITION DETECTOR WITH EDGE MOTION FEATURE

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Inventor: ALLEN TIMOTHY P (US); FAGGIN FEDERICO (US);
GILLESPIE DAVID (US); MILLER ROBERT J (US)
Applicant: SYNAPTICS INC (US)
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A proximity sensor system includes a sensor matrix array having a characteristic capacitance on horizontal and vertical conductors connected to sensor pads. The capacitance changes as a function of the proximity of an object or objects to the sensor matrix. The change in capacitance of each node in both the X and Y directions of the matrix due to the approach of an object is converted to a set of voltages in the X and Y directions. These voltages are processed by circuitry to develop electrical signals representative of the centroid of the profile of the object, i.e., its position in the X and Y dimensions. Noise reduction and background level setting techniques inherently available in the architecture are employed. The speed of the cursor movement depends on the one of the display it resides.

